From: Lichens, Christopher [Lichens.Christopher@epa.gov]

Sent: 9/30/2014 2:05:49 PM

To: Chesnutt, John [Chesnutt.John@epa.gov]; Stralka, Daniel [Stralka.Daniel@epa.gov]; Black, Ned

[Black.Ned@epa.gov]; ibalkissoon@techlawinc.com

Subject: FW: RHS TCRA - Kaneohe sample results (CONFERENCE CALL TODAY 0900)

Attachments: Lead in Urban Soils (USEPA 1998).pdf; Lead Urban Background (USEPA 1994).pdf

DOH response.

----Original Message----

From: Kotoshirodo, Jan H CIV NAVFAC HI, OPHEV3 [mailto:jan.kotoshirodo@navy.mil]

Sent: Monday, September 29, 2014 6:48 PM

To: Lichens, Christopher

Subject: FW: RHS TCRA - Kaneohe sample results (CONFERENCE CALL TODAY 0900)

FYI -

Some additional feedback from Roger Brewer at DOH.

v/r

Jan Kotoshirodo

Remedial Project Manager | NAVFAC Hawaii Environmental Restoration | (808) 471-1171 x 341

----Original Message----

From: Brewer, Roger C [mailto:roger.brewer@doh.hawaii.gov]

Sent: Monday, September 29, 2014 3:43 PM

To: Mow, Steven P; Kotoshirodo, Jan H CIV NAVFAC HI, OPHEV3; Makabe, Dennis I CIV NAVFAC HI, PRP211;

Haley Miranda

Cc: Fukumoto, Janice L CIV NAVFAC HI, EV3

Subject: RE: RHS TCRA - Kaneohe sample results (CONFERENCE CALL TODAY 0900)

Steve

That's my understanding. The property appears to have been restored to original conditions based on the volume of soil removed at the direction of the property owner. Concentrations of lead in soil in urban areas is commonly in the low 100s ppm or higher (see attached). The highest concentration of lead reported for remaining soil (390 mg/kg) is below the USEPA residential screening level of 400 mg/kg.

I joined in on a webinar entitled "Food Crop Contaminant Uptake in Brownfields" last Friday, presented by researchers from the University of Kansas. They focused on the uptake of lead uptake in vegetables and fruits in urban gardens. They found very little to no uptake in the plants. They emphasized that direct exposure to the soil is the main concerns (i.e., eating the soil, not eating the plants). This has also been our experience.

The highest reported concentration of arsenic (72 mg/kg) does not pose a significant health risk based on the typical bioavailability of arsenic in volcanic soils here (5-10%). The arsenic is probably related to past pesticide use around the house. The concentration of bioaccessible arsenic in the soil can reasonably be expected to be in the range of 5-15 mg/kg, well below our risk-based action level of 23 mg/kg.

Note that our residential action level for Benzo(a)pyrene is 150 ug/kg, not 15 ug/kg as written on the lab reports. The levels of BaP reported are below this action level and again typical of urban background and probably related to auto exhaust or small bits of asphalt.

Roger Brewer HDOH-HEER

----Original Message----

From: Mow, Steven P

Sent: Monday, September 29, 2014 10:39 AM

To: Kotoshirodo, Jan H CIV NAVFAC HI, OPHEV3; Jamie Anderson; Makabe, Dennis I CIV NAVFAC HI, PRP211;

Haley Miranda; Brewer, Roger C

Cc: Fukumoto, Janice L CIV NAVFAC HI, EV3

Subject: RE: RHS TCRA - Kaneohe sample results (CONFERENCE CALL TODAY

0900)

Spoke to Roger about the situation and my understanding of our discussion is that the levels are not inconsistent with urban background levels and that the suspected contaminated soil has been removed (over

2 truckloads, digging done under direction of the owner). Further sampling does not seem warranted in this specific case. Roger- Please correct me if I have misspoken or if you have more to add. ----Original Message----From: Kotoshirodo, Jan H CIV NAVFAC HI, OPHEV3 [mailto:jan.kotoshirodo@navy.mil] Sent: Monday, September 29, 2014 8:12 AM To: Mow, Steven P; Jamie Anderson; Makabe, Dennis I CIV NAVFAC HI, PRP211; Haley Miranda; Brewer, Roger C Cc: Fukumoto, Janice L CIV NAVFAC HI, EV3 Subject: RE: RHS TCRA - Kaneohe sample results (CONFERENCE CALL TODAY 0900) I set up a conf call number for 0900 today (Sep 29): 471-2663; Personal Matters / Ex. 6 Thanksv/r Jan Kotoshirodo Remedial Project Manager | NAVFAC Hawaii Environmental Restoration | (808) 471-1171 x 341 ----Original Message----From: Mow, Steven P [mailto:steven.mow@doh.hawaii.gov] Sent: Monday, September 29, 2014 7:32 AM To: Kotoshirodo, Jan H CIV NAVFAC HI, OPHEV3; Jamie Anderson; Makabe, Dennis I CIV NAVFAC HI, PRP211; Haley Miranda; Brewer, Roger C Cc: Fukumoto, Janice L CIV NAVFAC HI, EV3 Subject: RE: RHS TCRA - Kaneohe sample results Anytime this morning is fine. May want to include Dr. Brewer in on this one, He gets in at 8-8:30...9am call? ----Original Message----From: Kotoshirodo, Jan H CIV NAVFAC HI, OPHEV3 [mailto:jan.kotoshirodo@navy.mil] Sent: Monday, September 29, 2014 7:26 AM To: Mow, Steven P; Jamie Anderson; Makabe, Dennis I CIV NAVFAC HI, PRP211; Haley Miranda Cc: Fukumoto, Janice L CIV NAVFAC HI, EV3 Subject: RHS TCRA - Kaneohe sample results Hi Steve-Forwarding the lab data for the Kaneohe confirmation samples. We seem to have results above screening levels for benzo(a)pyrene, arsenic and lead (all three DUs). Steve/Jamie/Dennis: are you available for a conf call sometime today? I'd like to discuss the data, make a decision on the next steps. Thanksv/r Jan Kotoshirodo Remedial Project Manager | NAVFAC Hawaii Environmental Restoration | (808) 471-1171 x 341 ----Original Message----From: Jamie Anderson [mailto:janderson@cape-inc.com] Sent: Friday, September 26, 2014 2:54 PM To: Kotoshirodo, Jan H CIV NAVFAC HI, OPHEV3; Makabe, Dennis I CIV NAVFAC HI, PRP211 Cc: Thomas Strader; Haley Miranda; Carrie Plath Subject: Kaneohe sample results

We received the lab data for post-excavation confirmation samples collected in Kaneohe. All 3 samples had analytes exceeding our action levels. Attached file is an excerpt from the lab report. Highlighted analytes exceeded the action level. Action levels are identified in red ink. We will provide a full lab data summary table early next week, but wanted to get the info out as soon as possible so we can discuss our alternatives early next week. Thanks.

Jan/Dennis,

Jamie Anderson, PMP

Sr. Project Manager

CAPE Environmental Management Inc

808-791-6882 (o)

808-306-4415 (c)